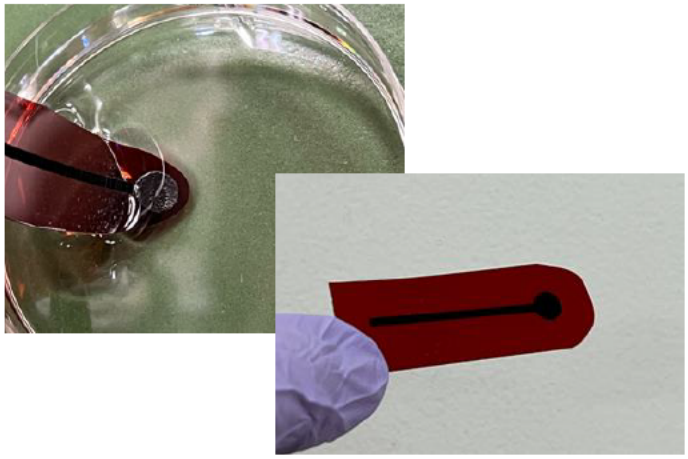
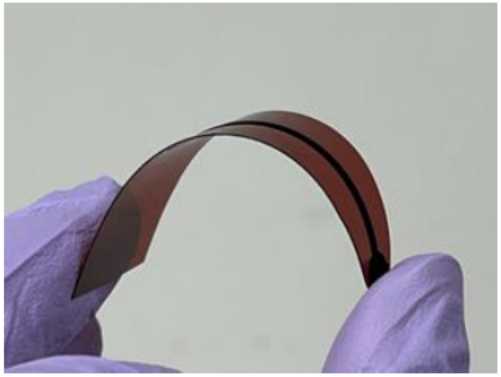
Flexible Electrochemical Biosensor

By reading out information from both internal and external sources of the body, it is possible to gain insights into health status and detect various diseases. Biosensors have the capability to measure a wide range of biological information, including bioelectric potentials, glucose levels, lactate levels, sodium ions, potassium ions, and more. However, the use of rigid sensors often leads to discomfort during wear. In this theme, we aim to develop a sensor for glucose measurement by fabricating electrodes on a plastic substrate. The electrode fabrication process involves laser-assisted carbonization to create flexible wiring. Through this training, you will learn the entire sequence of steps, from electrode fabrication to the measurement of biological samples.

Flexible electrode





Glucose measurement